

# Blast of SEQ ID NO:3 versus human genomic sequence

## MegaBlast:

MEGABLAST 1.2.3-Paracel [2001-11-20]

## Reference:

Zheng Zhang, Scott Schwartz, Lukas Wagner, and Webb Miller (2000),  
"A greedy algorithm for aligning DNA sequences",  
J Comput Biol 2000; 7(1-2):203-14.

Database: Homo\_sapiens.latestgp.masked.fa

44,521 sequences; 200,768,834,160 total letters

Query= seqid3

(3645 letters)

	Score	E
	(bits)	Value

Sequences producing significant alignments:

AC116621.6.101924.177999	442	e-121
AC116621.6.22858.101182	406	e-110
AC116615.3.60396.89763	406	e-110
AC084724.3.6664.29537	389	e-105
AC084724.3.127117.217563	331	2e-87
AC084724.3.29638.51693	232	1e-57
AC116643.2.13772.15264	178	2e-41
AC116642.2.30736.38115	170	4e-39

>AC116621.6.101924.177999

Length = 76076

Score = 442 bits (223), Expect = e-121

Identities = 233/236 (98%), Gaps = 1/236 (0%)

Strand = Plus / Minus

Query: 1985 tttca-agtaagcgagaaataacttcgcagattaaatgaaaatcttaaagctcaagaagat 2043  
||||| ||||||||||||||||||| ||||||||||||||||||| |||||||||||||||||||  
Sbjct: 69908 tttcagagtaagcgagaaataacttcgtagattaaatgaaaatcttaaagctcaagaagat 69849

Query: 2044 gaaaaaggaatgcagaatctctctgatacttttgagataaatgttcattgaagatgccaaa 2103  
||||| ||||||||||||||||||| ||||||||||||||||||| |||||||||||||||||||  
Sbjct: 69848 gaaaaaggaagcagaatctctctgatacttttgagataaatgttcattgaagatgccaaa 69789

Query: 2104 gagcatgaaaaagaaaaatcagtttcatctgatcgcaagaagtgggaggcaggaggtcaa 2163  
||||| ||||||||||||||||||| ||||||||||||||||||| |||||||||||||||||||  
Sbjct: 69788 gagcatgaaaaagaaaaatcagtttcatctgatcgcaagaagtgggaggcaggaggtcaa 69729

Query: 2164 cttgtgattcctctggatgagttaacactagatacatccttctctacaactgaaag 2219  
||||| ||||||||||||||||||| ||||||||||||||||||| |||||||||||||||||||  
Sbjct: 69728 cttgtgattcctctggatgagttaacactagatacatccttctctacaactgaaag 69673

Score = 357 bits (180), Expect = 3e-95

Identities = 180/180 (100%)

Strand = Plus / Minus

Query: 2757 agagcctggaaccaatgattctcagcactctaaatgtgatgtagataagctctgtgcaacc 2816  
 |||||  
 Sbjct: 17338 agagcctggaaccaatgattctcagcactctaaatgtgatgtagataagctctgtgcaacc 17279

Query: 2817 ggaaccatttttccataaggtgggttcattctgaacacttgaacttagtccctcaagttca 2876  
 |||||  
 Sbjct: 17278 ggaaccatttttccataaggtgggttcattctgaacacttgaacttagtccctcaagttca 17219

Query: 2877 atcagttcagtgttcaccagaagaatcctttgcatttcgatctcactcgcatattaccacc 2936  
 |||||  
 Sbjct: 17218 atcagttcagtgttcaccagaagaatcctttgcatttcgatctcactcgcatattaccacc 17159

Score = 303 bits (153), Expect = 4e-79  
 Identities = 153/153 (100%)  
 Strand = Plus / Minus

Query: 2219 gacatacagtgggagaagttattaaattaggtcctaattggatctccaagaagagcctggg 2278  
 |||||  
 Sbjct: 55945 gacatacagtgggagaagttattaaattaggtcctaattggatctccaagaagagcctggg 55886

Query: 2279 ggaaaagtccgacagattctgttctaaagataacttggagaagctgaactacaacttcaga 2338  
 |||||  
 Sbjct: 55885 ggaaaagtccgacagattctgttctaaagataacttggagaagctgaactacaacttcaga 55826

Query: 2339 cagaactattagaaaatacaactattagaagtg 2371  
 |||||  
 Sbjct: 55825 cagaactattagaaaatacaactattagaagtg 55793

Score = 264 bits (133), Expect = 4e-67  
 Identities = 133/133 (100%)  
 Strand = Plus / Minus

Query: 1792 ttggtggctaaaggaggttaagagttctgatgtttctccaccttgggacagcatgaaaca 1851  
 |||||  
 Sbjct: 72084 ttggtggctaaaggaggttaagagttctgatgtttctccaccttgggacagcatgaaaca 72025

Query: 1852 ggtggctctccatcaaagcaacagatgagatctgttatttctgtaacttcagctttgaaa 1911  
 |||||  
 Sbjct: 72024 ggtggctctccatcaaagcaacagatgagatctgttatttctgtaacttcagctttgaaa 71965

Query: 1912 gaagttggcgtgg 1924  
 |||||  
 Sbjct: 71964 gaagttggcgtgg 71952

Score = 248 bits (125), Expect = 2e-62

Identities = 125/125 (100%)  
Strand = Plus / Minus

Query: 2547 agaacctgatgatttggaacagaaattctacaagagccaagtggaacaaacaagatga 2606  
|||||  
Sbjct: 26219 agaacctgatgatttggaacagaaattctacaagagccaagtggaacaaacaagatga 26160

Query: 2607 gagcttgccatgcactattactgatgtgtggattagtgaggaaaaagaacaaaggaaac 2666  
|||||  
Sbjct: 26159 gagcttgccatgcactattactgatgtgtggattagtgaggaaaaagaacaaaggaaac 26100

Query: 2667 tcagt 2671  
|||||  
Sbjct: 26099 tcagt 26095

Score = 246 bits (124), Expect = 8e-62  
Identities = 124/124 (100%)  
Strand = Plus / Minus

Query: 2425 gtacaatgtatttcacatgaaataaacccatcagctattgttgattctcctgttgagaca 2484  
|||||  
Sbjct: 30756 gtacaatgtatttcacatgaaataaacccatcagctattgttgattctcctgttgagaca 30697

Query: 2485 aaaagtcccgagttcagtgaggcatctccacagatgtcattgaaactggaaggaaattta 2544  
|||||  
Sbjct: 30696 aaaagtcccgagttcagtgaggcatctccacagatgtcattgaaactggaaggaaattta 30637

Query: 2545 gaag 2548  
|||||  
Sbjct: 30636 gaag 30633

Score = 176 bits (89), Expect = 6e-41  
Identities = 89/89 (100%)  
Strand = Plus / Minus

Query: 2670 gtcggcagataggatcaccattcaggaaaatgaagtttctgaagatggagtctcgagtac 2729  
|||||  
Sbjct: 18770 gtcggcagataggatcaccattcaggaaaatgaagtttctgaagatggagtctcgagtac 18711

Query: 2730 tgtggaccaacttagtgacattcatatag 2758  
|||||  
Sbjct: 18710 tgtggaccaacttagtgacattcatatag 18682

Score = 135 bits (68), Expect = 2e-28  
Identities = 72/73 (98%), Gaps = 1/73 (1%)  
Strand = Plus / Minus

Query: 1923 ggacagtagtttaactgatacccgggaaacttcagaagagatgcaaaagaccaacaatgc 1982  
|||||  
Sbjct: 70048 ggacagtagtttaactgatacccgggaaacttcagaagagatgcaaaagaccaacaatgc 69989

Query: 1983 tatttcaagtaag 1995  
|||||  
Sbjct: 69988 tatttca-gtaag 69977

Score = 115 bits (58), Expect = 2e-22  
Identities = 58/58 (100%)  
Strand = Plus / Minus

Query: 2949 caagaattccttgctgattggactttcaactgggtctgtttgatgcaaacaacccaaag 3006  
|||||  
Sbjct: 17146 caagaattccttgctgattggactttcaactgggtctgtttgatgcaaacaacccaaag 17089

Score = 91.7 bits (46), Expect = 3e-15  
Identities = 46/46 (100%)  
Strand = Plus / Minus

Query: 2371 gagatttctcccgaaggggaaaagtacaaacccttaattactggag 2416  
|||||  
Sbjct: 30810 gagatttctcccgaaggggaaaagtacaaacccttaattactggag 30765

>AC116621.6.22858.101182  
Length = 78325

Score = 406 bits (205), Expect = e-110  
Identities = 208/209 (99%)  
Strand = Plus / Minus

Query: 3159 tgtgtttgaagaaactgacacagatttacaagagctgcaggcctcgatggaacagttact 3218  
|||||  
Sbjct: 74191 tgtgtttgaagaaactgacacagatttacaagagctgcaggcctcgatggaacagttact 74132

Query: 3219 tagggaacaacctggtgaagaatacagtgaagaagaagagtcagtcttgaagaacagtga 3278  
|||||  
Sbjct: 74131 tagggaacaacctggtgaagaatacagtgaagaagaagagtcagtcttgaagaacagtga 74072

Query: 3279 tgtggagccaactgcaaatgggacagatgtggcagatgaagatgacaatcccagtagtga 3338  
|||||  
Sbjct: 74071 tgtggagccaactgcaaatgggacagatgtggcagatgaagatgacaatcccagtagtga 74012

Query: 3339 aagtgccctgaacgaagaatggcactcag 3367  
|||||  
Sbjct: 74011 aagtgccctgaacgaagaatggcactcag 73983

Score = 268 bits (135), Expect = 2e-68  
Identities = 135/135 (100%)  
Strand = Plus / Minus

Query: 3497 aggctattcatgaagatgaagatgaaaatattgaaatttggtcaaaaatagttcaaaata 3556  
|||||  
Sbjct: 72690 aggctattcatgaagatgaagatgaaaatattgaaatttggtcaaaaatagttcaaaata 72631

Query: 3557 ttttgggaaatgaacatcagcatctttatgccaagattcttcatttagtcatggcagatg 3616  
|||||  
Sbjct: 72630 ttttgggaaatgaacatcagcatctttatgccaagattcttcatttagtcatggcagatg 72571

Query: 3617 gagcctaccaagaag 3631  
|||||  
Sbjct: 72570 gagcctaccaagaag 72556

Score = 266 bits (134), Expect = 9e-68  
Identities = 134/134 (100%)  
Strand = Plus / Minus

Query: 3366 agataacagtgatggtgaaattgctagtgaatgtgaatgcgatagtgtctttaaccattt 3425  
|||||  
Sbjct: 72984 agataacagtgatggtgaaattgctagtgaatgtgaatgcgatagtgtctttaaccattt 72925

Query: 3426 agaggaactgagacttcatctggagcaggaaatgggctttgaaaaattctttgaggttta 3485  
|||||  
Sbjct: 72924 agaggaactgagacttcatctggagcaggaaatgggctttgaaaaattctttgaggttta 72865

Query: 3486 tgagaaaataaagg 3499  
|||||  
Sbjct: 72864 tgagaaaataaagg 72851

>AC116615.3.60396.89763  
Length = 29368

Score = 406 bits (205), Expect = e-110  
Identities = 208/209 (99%)  
Strand = Plus / Minus

Query: 3159 tgtgtttgaagaaactgacacagatttacaagagctgcaggcctcgatggaacagttact 3218  
|||||  
Sbjct: 21838 tgtgtttgaagaaactgacacagatttacaagagctgcaggcctcgatggaacagttact 21779

Query: 3219 tagggaacaacctggtgaagaatacagtgaagaagaagagtcagtccttgaagaacagtga 3278  
|||||  
Sbjct: 21778 tagggaacaacctggtgaagaatacagtgaagaagaagagtcagtccttgaagaacagtga 21719

Query: 3279 tgtggagccaactgcaaattgggacagatgtggcagatgaagatgacaatcccagtagtga 3338  
|||||  
Sbjct: 21718 tgtggagccaactgcaaattgggacagatgtggcagatgaagatgacaatcccagcagtga 21659

Query: 3339 aagtgccctgaacgaagaatggcactcag 3367  
|||||  
Sbjct: 21658 aagtgccctgaacgaagaatggcactcag 21630

Score = 297 bits (150), Expect = 3e-77  
Identities = 153/154 (99%)  
Strand = Plus / Minus

Query: 3005 agatgttaaggacatgttcacttcagatctctcaaagctgttcagaacccttatggatg 3064  
|||||  
Sbjct: 26727 agatgttaaggacatgttcacttcagatctctcaaagctgttcagaacccttatggatg 26668

Query: 3065 ttcccaccgtaggagatgttcgtcaagacaatcttgaaatagatgaaattaaagatgaaa 3124  
|||||  
Sbjct: 26667 ttcccaccgtaggagatgttcgtcaagacaatcttgaaatagatgaaattgaagatgaaa 26608

Query: 3125 acattaaagaaggaccttctgattctgaagacat 3158  
|||||  
Sbjct: 26607 acattaaagaaggaccttctgattctgaagacat 26574

Score = 268 bits (135), Expect = 2e-68  
Identities = 135/135 (100%)  
Strand = Plus / Minus

Query: 3497 aggctattcatgaagatgaagatgaaaatattgaaatttgttcaaaaatagttcaaaata 3556  
|||||  
Sbjct: 20337 aggctattcatgaagatgaagatgaaaatattgaaatttgttcaaaaatagttcaaaata 20278

Query: 3557 ttttgggaaatgaacatcagcatctttatgccaaagattcttcatttagtcatggcagatg 3616  
|||||  
Sbjct: 20277 ttttgggaaatgaacatcagcatctttatgccaaagattcttcatttagtcatggcagatg 20218

Query: 3617 gagcctaccaagaag 3631  
|||||  
Sbjct: 20217 gagcctaccaagaag 20203

Score = 266 bits (134), Expect = 9e-68  
Identities = 134/134 (100%)  
Strand = Plus / Minus

Query: 3366 agataacagtgatggtgaaattgctagtgaatgtgaatgcgatagtgctcttaaccattt 3425  
|||||

Sbjct: 20631 agataacagtgtggtgaaattgctagtgaatgtgaatgcatagtgtctttaaccattt 20572

Query: 3426 agaggaactgagacttcatctggagcaggaaatgggctttgaaaaattctttgaggttta 3485  
|||||

Sbjct: 20571 agaggaactgagacttcatctggagcaggaaatgggctttgaaaaattctttgaggttta 20512  
|||||

Query: 3486 tgagaaaataaagg 3499  
|||||

Sbjct: 20511 tgagaaaataaagg 20498  
|||||

>AC084724.3.6664.29537  
Length = 22874

Score = 389 bits (196), Expect = e-105  
Identities = 200/201 (99%), Gaps = 1/201 (0%)  
Strand = Plus / Plus

Query: 607 tttgaagctggcagtatgaaaaacctggtactgaagataatatctggatctttccacct 666  
|||||

Sbjct: 7611 tttgaagctggcagtatgaaaaacctggtactgaagataatatctggatctttccacct 7670  
|||||

Query: 667 gtgtctttgcattattcctatgatctccgcagtttggtgtctcagttatttaaagaaat 726  
|||||

Sbjct: 7671 gtgtctttgcattattcctatgatctccgcagtttggtgtctcagttatttaaagaaat 7730  
|||||

Query: 727 cctagggatagaccatcagtcactccatattggagaaagggtttatagccaaacgcatt 786  
|||||

Sbjct: 7731 cctagggatagaccatcagtcactccatattggagaaagggtttatagccaaacg-att 7789  
|||||

Query: 787 gaaaagtttctctctcctcag 807  
|||||

Sbjct: 7790 gaaaagtttctctctcctcag 7810  
|||||

Score = 307 bits (155), Expect = 3e-80  
Identities = 155/155 (100%)  
Strand = Plus / Plus

Query: 867 agctaaaagaccagcttcaggacaaaactcgatttctgttatgcctgctcagaaaattac 926  
|||||

Sbjct: 16079 agctaaaagaccagcttcaggacaaaactcgatttctgttatgcctgctcagaaaattac 16138  
|||||

Query: 927 aaagcctgccgctaaatatggaataccttttagcatataagaaatatggagataaaaaatt 986  
|||||

Sbjct: 16139 aaagcctgccgctaaatatggaataccttttagcatataagaaatatggagataaaaaatt 16198  
|||||

Query: 987 acacgaaaagaaaccactgcaaaaacataaacagg 1021  
|||||

Sbjct: 16199 acacgaaaagaaaccactgcaaaaacataaacagg 16233  
|||||

Score = 178 bits (90), Expect = 2e-41  
Identities = 90/90 (100%)  
Strand = Plus / Plus

Query: 462 tagtactgtagagctggctcgaacttgcatagggaccccatactacttgtcacctgaaat 521  
|||||  
Sbjct: 4422 tagtactgtagagctggctcgaacttgcatagggaccccatactacttgtcacctgaaat 4481

Query: 522 ctgtgaaaacaaaccttacaataataaaag 551  
|||||  
Sbjct: 4482 ctgtgaaaacaaaccttacaataataaaag 4511

Score = 170 bits (86), Expect = 4e-39  
Identities = 86/86 (100%)  
Strand = Plus / Plus

Query: 311 agattttggactggtttgtacagatatgtttggccctgaaacatgtacatgatagaaaaa 370  
|||||  
Sbjct: 2349 agattttggactggtttgtacagatatgtttggccctgaaacatgtacatgatagaaaaa 2408

Query: 371 ttcttcacgagacattaaatctcag 396  
|||||  
Sbjct: 2409 ttcttcacgagacattaaatctcag 2434

Score = 141 bits (71), Expect = 4e-30  
Identities = 71/71 (100%)  
Strand = Plus / Plus

Query: 394 cagaacatatttttaactaaagatggaacagtacaacttggagattttggaattgctaga 453  
|||||  
Sbjct: 3643 cagaacatatttttaactaaagatggaacagtacaacttggagattttggaattgctaga 3702

Query: 454 gttcttaatag 464  
|||||  
Sbjct: 3703 gttcttaatag 3713

Score = 133 bits (67), Expect = 9e-28  
Identities = 70/71 (98%)  
Strand = Plus / Plus

Query: 803 ctcagcttattgcagaagaattttgtctaaaaacattttcgaagtttggatcacagccta 862  
|||||  
Sbjct: 12253 ctcagcttattgcagaagaattttgtctaaaaacattttcgaagtttggatcacagccta 12312



Query: 863 taccagctaaa 873  
|||||  
Sbjct: 12313 taccaggtaaa 12323

Score = 113 bits (57), Expect = 8e-22  
Identities = 57/57 (100%)  
Strand = Plus / Plus

Query: 550 agtgacatttgggctctggggtgtgtcctttatgagctgtgtacacttaaacaatgct 606  
|||||  
Sbjct: 5545 agtgacatttgggctctggggtgtgtcctttatgagctgtgtacacttaaacaatgct 5601

>AC084724.3.127117.217563  
Length = 90447

Score = 331 bits (167), Expect = 2e-87  
Identities = 167/167 (100%)  
Strand = Plus / Plus

Query: 1265 aggctccttttctgggcagtgaggaggactatagctccatcatcttttcttctcgaggac 1324  
|||||  
Sbjct: 13121 aggctccttttctgggcagtgaggaggactatagctccatcatcttttcttctcgaggac 13180

Query: 1325 agtatgaacattaccatgccatttttgaccaaagcagcaacaagagcagaagataatg 1384  
|||||  
Sbjct: 13181 agtatgaacattaccatgccatttttgaccaaagcagcaacaagagcagaagataatg 13240

Query: 1385 aagctaaatggaaaagagaaatatatggtcagaggtcttccagaaagg 1431  
|||||  
Sbjct: 13241 aagctaaatggaaaagagaaatatatggtcagaggtcttccagaaagg 13287

Score = 264 bits (133), Expect = 4e-67  
Identities = 133/133 (100%)  
Strand = Plus / Plus

Query: 1792 ttggtggctaaaggagttaagagttctgatgtttctccaccttgggacagcatgaaaca 1851  
|||||  
Sbjct: 89675 ttggtggctaaaggagttaagagttctgatgtttctccaccttgggacagcatgaaaca 89734

Query: 1852 ggtggctctccatcaaagcaacagatgagatctgttatttctgtaacttcagctttgaaa 1911  
|||||  
Sbjct: 89735 ggtggctctccatcaaagcaacagatgagatctgttatttctgtaacttcagctttgaaa 89794

Query: 1912 gaagttggcgtgg 1924  
|||||  
Sbjct: 89795 gaagttggcgtgg 89807

Score = 212 bits (107), Expect = 1e-51  
Identities = 107/107 (100%)  
Strand = Plus / Plus

Query: 1429 aggcaaaaagggcagctagctgtagaaagagctaaacaagtagaagagttcctgcagcga 1488  
|||||  
Sbjct: 31300 aggcaaaaagggcagctagctgtagaaagagctaaacaagtagaagagttcctgcagcga 31359

Query: 1489 aaacgggaagctatgcagaataaagctcgagccgaaggacatatggt 1535  
|||||  
Sbjct: 31360 aaacgggaagctatgcagaataaagctcgagccgaaggacatatggt 31406

Score = 168 bits (85), Expect = 2e-38  
Identities = 85/85 (100%)  
Strand = Plus / Plus

Query: 1533 ggtttatctggcaagactgaggcaaataagactacagaatttcaatgagcgccaacagat 1582  
|||||  
Sbjct: 60881 ggtttatctggcaagactgaggcaaataagactacagaatttcaatgagcgccaacagat 60940

Query: 1593 taaagccaaacttcgtggtgaaaag 1617  
|||||  
Sbjct: 60941 taaagccaaacttcgtggtgaaaag 60965

Score = 153 bits (77), Expect = 9e-34  
Identities = 77/77 (100%)  
Strand = Plus / Plus

Query: 1191 gttggaaagaataaatagggccaggggaacaaggatggagaaatgtgctaagtgtggtgg 1250  
|||||  
Sbjct: 7663 gttggaaagaataaatagggccaggggaacaaggatggagaaatgtgctaagtgtggtgg 7722

Query: 1251 aagtgtgaagtaaagg 1267  
|||||  
Sbjct: 7723 aagtgtgaagtaaagg 7739

Score = 149 bits (75), Expect = 1e-32  
Identities = 75/75 (100%)  
Strand = Plus / Plus

Query: 1694 aggcccatgcaaatagcacgtgctgtactaaaagaacaactagaacgaaagagaaagg 1753  
|||||  
Sbjct: 62079 aggcccatgcaaatagcacgtgctgtactaaaagaacaactagaacgaaagagaaagg 62138

Query: 1754 aggcttatgagagag 1768  
|||||

Sbjct: 62139 aggccttatgagagag 62153

Score = 127 bits (64), Expect = 5e-26  
Identities = 64/64 (100%)  
Strand = Plus / Plus

Query: 1018 caggcccatcaaactccagagaagagagtgaatactggagaagaaaggaggaaaatatct 1077  
|||||  
Sbjct: 7019 caggcccatcaaactccagagaagagagtgaatactggagaagaaaggaggaaaatatct 7078

Query: 1078 gagg 1081  
||||  
Sbjct: 7079 gagg 7082

Score = 123 bits (62), Expect = 8e-25  
Identities = 62/62 (100%)  
Strand = Plus / Plus

Query: 1079 aggaagcagcaagaaagagaaggctggaattttattgaaaaagaaaagaaacaaaaggatc 1138  
|||||  
Sbjct: 7325 aggaagcagcaagaaagagaaggctggaattttattgaaaaagaaaagaaacaaaaggatc 7384

Query: 1139 ag 1140  
||  
Sbjct: 7385 ag 7386

Score = 117 bits (59), Expect = 5e-23  
Identities = 59/59 (100%)  
Strand = Plus / Plus

Query: 1616 agaaagaagctaatacttctgaaggacaagaaggaagtgaagaggctgacatgaggcgc 1674  
|||||  
Sbjct: 61419 agaaagaagctaatacttctgaaggacaagaaggaagtgaagaggctgacatgaggcgc 61477

Score = 107 bits (54), Expect = 5e-20  
Identities = 54/54 (100%)  
Strand = Plus / Plus

Query: 1138 cagattattagtttaatgaaggctgaacaaatgaaaaggcaagaaaaggaaagg 1191  
|||||  
Sbjct: 7478 cagattattagtttaatgaaggctgaacaaatgaaaaggcaagaaaaggaaagg 7531

>AC084724.3.29638.51693  
Length = 22056

Score = 232 bits (117), Expect = 1e-57  
Identities = 117/117 (100%)  
Strand = Plus / Plus

Query: 1 atggagaagtatgtagactacagaagattggagaagggttcatttggaaaagccattctt 60  
|||||  
Sbjct: 12568 atggagaagtatgtagactacagaagattggagaagggttcatttggaaaagccattctt 12627

Query: 61 gttaaactctacagaagatggcagacagtatgttatcaaggaaattaacatctcaaga 117  
|||||  
Sbjct: 12628 gttaaactctacagaagatggcagacagtatgttatcaaggaaattaacatctcaaga 12684

Score = 200 bits (101), Expect = 4e-48  
Identities = 104/105 (99%)  
Strand = Plus / Plus

Query: 208 tttgaagaaaatggctctctctacatagtaatggattactgtgagggaggggatctgttt 267  
|||||  
Sbjct: 15993 tttgtagaaaatggctctctctacatagtaatggattactgtgagggaggggatctgttt 16052

Query: 268 aagcgaataaatgctcagaaaggcggttttgtttcaaggaggatcag 312  
|||||  
Sbjct: 16053 aagcgaataaatgctcagaaaggcggttttgtttcaaggaggatcag 16097

Score = 192 bits (97), Expect = 1e-45  
Identities = 97/97 (100%)  
Strand = Plus / Plus

Query: 118 atgtccagtaaagaaagagaagaatcaaggagagaagttgcagtattggcaaacatgaag 177  
|||||  
Sbjct: 13094 atgtccagtaaagaaagagaagaatcaaggagagaagttgcagtattggcaaacatgaag 13153

Query: 178 catccaaatattgtccagtatagagaatcatttgaag 214  
|||||  
Sbjct: 13154 catccaaatattgtccagtatagagaatcatttgaag 13190

>AC116643.2.13772.15264  
Length = 1493

Score = 178 bits (90), Expect = 2e-41  
Identities = 90/90 (100%)  
Strand = Plus / Minus

Query: 462 tagtactgtagagctggctcgaacttgcatagggacccatactacttgtcacctgaaat 521  
|||||  
Sbjct: 1051 tagtactgtagagctggctcgaacttgcatagggacccatactacttgtcacctgaaat 992

Query: 522 ctgtgaaaacaaaccttacaataataaaag 551  
|||||  
Sbjct: 991 ctgtgaaaacaaaccttacaataataaaag 962

>AC116642.2.30736.38115  
Length = 7380

Score = 170 bits (86), Expect = 4e-39  
Identities = 86/86 (100%)  
Strand = Plus / Minus

Query: 311 agattttggactggtttgtacagatatgttggccctgaaacatgtacatgatagaaaaa 370  
|||||  
Sbjct: 1978 agattttggactggtttgtacagatatgttggccctgaaacatgtacatgatagaaaaa 1919

Query: 371 ttcttcacgcgagacattaaatctcag 396  
|||||  
Sbjct: 1918 ttcttcacgcgagacattaaatctcag 1893

Score = 95.6 bits (48), Expect = 2e-16  
Identities = 63/68 (92%)  
Strand = Plus / Minus

Query: 397 aacatatttttaactaaagatggaacagtacaacttggagattttggaattgctagagtt 456  
|||||  
Sbjct: 681 aacatatttttacctaccgatggaacagtacaacttggatattttggaattgctacagtt 622

Query: 457 cttaatag 464  
|||||  
Sbjct: 621 cttaatag 614